



FORM PTO-1449

SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250INVENTORS  
SORRELLS *et al.*FILING DATE  
March 4, 2002ART UNIT  
2687

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                     | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|--------------------------|-------|-----------|-------------|
|                     | AA   |                 |         |                          |       |           |             |
|                     | AB   |                 |         |                          |       |           |             |
|                     | AC   |                 |         |                          |       |           |             |
|                     | AD   |                 |         |                          |       |           |             |
|                     | AE   |                 |         |                          |       |           |             |
|                     | AF   |                 |         |                          |       |           |             |
| SB                  | AG55 | 5,682,099       | 10/1997 | Thompson <i>et al.</i>   |       |           |             |
|                     | AH55 | 6,094,084       | 07/2000 | Abou-Allam <i>et al.</i> |       |           |             |
| SB                  | AI55 | 6,067,329       | 05/2000 | Kato <i>et al.</i>       |       |           |             |

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER  | DATE    | COUNTRY | CLASS | SUB-CLASS | TRANSLATION        |
|---------------------|------|------------------|---------|---------|-------|-----------|--------------------|
|                     | AJ   |                  |         |         |       |           | Yes<br>No          |
|                     | AK   |                  |         |         |       |           | Yes<br>No          |
| SB                  | AL23 | DE 196 48 915 A1 | 06/1998 | DE      |       |           | Yes<br>(Doc. AO59) |
|                     | AM   |                  |         |         |       |           | Yes<br>No          |

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|    |    |    |   |  |  |  |  |
|----|----|----|---|--|--|--|--|
| SB | AN | 59 | Simoni, A. <i>et al.</i> , "A Single-Chip Optical Sensor with Analog Memory for Motion Detection," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. 30, No. 7, pp. 800-806 (July 1995). |  |  |  |  |
|    | AO | 59 | English Translation of German Patent Publication No. DE 196 48 915 A1, 10 pages.  |  |  |  |  |
| SB | AP | 59 | Deboo, Gordon J., <i>Integrated Circuits and Semiconductor Devices</i> , 2 <sup>nd</sup> Edition, McGraw-Hill, Inc., pp. 41-45 (1977).  |  |  |  |  |
|    | AQ |    |   |  |  |  |  |
|    | AR |    |   |  |  |  |  |

EXAMINER

*Khatri*

DATE CONSIDERED

6/8/05

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1744.0140008APPLICATION NO.  
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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                   | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|------------------------|-------|-----------|-------------|
| SB                  | AA56 | 6,516,185       | 02/2003 | MacNally               |       |           | /           |
|                     | AB56 | 6,608,647       | 08/2003 | King                   |       |           | /           |
|                     | AC56 | 6,687,493 B1    | 02/2004 | Sorrells <i>et al.</i> |       |           | /           |
|                     | AD56 | 6,694,128 B1    | 02/2004 | Sorrells <i>et al.</i> |       |           | /           |
|                     | AE56 | 6,031,217       | 02/2000 | Aswell <i>et al.</i>   |       |           | /           |
|                     | AF56 | 5,955,992       | 09/1999 | Shattil                |       |           | /           |
|                     | AG56 | 5,999,561       | 12/1999 | Naden <i>et al.</i>    |       |           | /           |
|                     | AH56 | 6,686,879 B2    | 02/2004 | Shattil                |       |           | /           |
| SB                  | AI56 | 6,704,549 B1    | 03/2004 | Sorrells <i>et al.</i> |       |           | /           |

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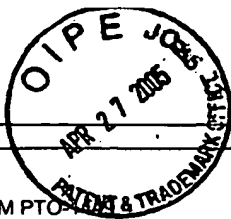
| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
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|                     | AJ |                 |      |         |       |           | Yes<br>No   |
|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

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EXAMINER *Sshattil*DATE CONSIDERED *6/8/05*

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                    | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|-------------------------|-------|-----------|-------------|
| SB                  | AA57 | 6,704,558 B1    | 03/2004 | Sorrells <i>et al.</i>  |       |           |             |
|                     | AB57 | 5,490,176       | 02/1996 | Peltier                 |       |           |             |
|                     | AC57 | 5,970,053       | 10/1999 | Schick <i>et al.</i>    |       |           |             |
|                     | AD57 | 6,078,630       | 06/2000 | Prasanna                |       |           |             |
|                     | AE57 | 6,600,911 B1    | 07/2003 | Morishige <i>et al.</i> |       |           |             |
|                     | AF57 | 5,179,731       | 01/1993 | Tränkle <i>et al.</i>   |       |           |             |
|                     | AG57 | 5,589,793       | 12/1996 | Kassapian               |       |           |             |
|                     | AH57 | 4,510,467       | 04/1985 | Chang <i>et al.</i>     |       |           |             |
| SB                  | AI57 | 4,772,853       | 09/1988 | Hart                    |       |           |             |

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EXAMINER

*Skhatachay*

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                    | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|-------------------------|-------|-----------|-------------|
| SB                  | AA58 | 4,972,436       | 11/1990 | Halim <i>et al.</i>     |       |           | /           |
|                     | AB58 | 5,012,245       | 04/1991 | Scott <i>et al.</i>     |       |           | /           |
|                     | AC58 | 5,422,909       | 06/1995 | Love <i>et al.</i>      |       |           | /           |
|                     | AD58 | 5,440,311       | 08/1995 | Gallagher <i>et al.</i> |       |           | /           |
|                     | AE58 | 5,926,513       | 07/1999 | Suominen <i>et al.</i>  |       |           | /           |
|                     | AF58 | 5,995,030       | 11/1999 | Cabler                  |       |           | /           |
|                     | AG58 | 6,047,026       | 04/2000 | Chao <i>et al.</i>      |       |           | /           |
|                     | AH58 | 6,049,573       | 04/2000 | Song                    |       |           | /           |
| SB                  | AI58 | 6,076,015       | 06/2000 | Hartley <i>et al.</i>   |       |           | /           |

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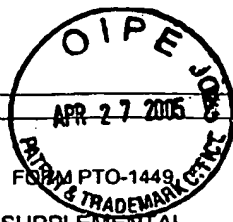
EXAMINER

S. Shattachay

DATE CONSIDERED

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| SB                  | AA59 | 6,144,331       | 11/2000 | Jiang                       |       |           | /           |
|                     | AB59 | 6,018,553       | 01/2000 | Sanielevici <i>et al.</i>   |       |           | /           |
|                     | AC59 | 6,317,589 B1    | 11/2001 | Nash                        |       |           | /           |
|                     | AD59 | 5,058,107       | 10/1991 | Stone <i>et al.</i>         |       |           | /           |
|                     | AE59 | 5,757,858       | 05/1998 | Black <i>et al.</i>         |       |           | /           |
|                     | AF59 | 6,531,979 B1    | 03/2003 | Hynes                       |       |           | /           |
|                     | AG59 | 6,018,262       | 01/2000 | Noro <i>et al.</i>          |       |           | /           |
|                     | AH59 | 4,761,798       | 08/1988 | Griswold, Jr. <i>et al.</i> |       |           | /           |
| SB                  | AI59 | 5,982,315       | 11/1999 | Bazarjani <i>et al.</i>     |       |           | /           |

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EXAMINER

S/Bhattacharya

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                     | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|--------------------------|-------|-----------|-------------|
| SB                  | AA60 | 6,459,721 B1    | 10/2002 | Mochizuki <i>et al.</i>  |       |           | /           |
|                     | AB60 | 6,151,354       | 11/2000 | Abbey                    |       |           | /           |
|                     | AC60 | 6,169,733 B1    | 01/2001 | Lee                      |       |           | /           |
|                     | AD60 | 6,363,262 B1    | 03/2002 | McNicol                  |       |           | /           |
|                     | AE60 | 6,697,603 B1    | 02/2004 | Lovinggood <i>et al.</i> |       |           | /           |
|                     | AF60 | 5,282,222       | 01/1994 | Fattouche <i>et al.</i>  |       |           | /           |
|                     | AG60 | 5,949,827       | 09/1999 | DeLuca <i>et al.</i>     |       |           | /           |
|                     | AH60 | 6,014,176       | 01/2000 | Nayebi <i>et al.</i>     |       |           | /           |
| SB                  | AI60 | 5,678,226       | 10/1997 | Li <i>et al.</i>         |       |           | /           |

## FOREIGN PATENT DOCUMENTS

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|                     | AJ |                 |      |         |       |           | Yes<br>No   |
|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

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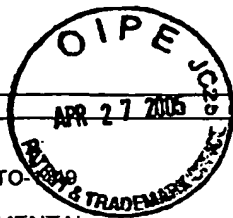
EXAMINER

S. Shallaachan

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                   | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|------------------------|-------|-----------|-------------|
| SB                  | AA61 | 5,760,632       | 06/1998 | Kawakami <i>et al.</i> |       |           |             |
|                     | AB61 | 6,160,280       | 12/2000 | Bonn <i>et al.</i>     |       |           |             |
|                     | AC61 | 5,481,570       | 01/1996 | Winters                |       |           |             |
|                     | AD61 | 5,745,846       | 04/1998 | Myer <i>et al.</i>     |       |           |             |
|                     | AE61 | 5,345,239       | 09/1994 | Madni <i>et al.</i>    |       |           |             |
|                     | AF61 | 4,132,952       | 01/1979 | Hongu <i>et al.</i>    |       |           |             |
|                     | AG61 | 5,260,973       | 11/1993 | Watanabe               |       |           |             |
|                     | AH61 | 6,307,894 B2    | 10/2001 | Eidson <i>et al.</i>   |       |           |             |
| SB                  | AI61 | 6,091,289       | 07/2000 | Song <i>et al.</i>     |       |           |             |

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|                     | AJ |                 |      |         |       |           | Yes<br>No   |
|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

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|---------------------|------|-----------------|---------|--------------------------|-------|-----------|-------------|
| SB                  | AA62 | 6,437,639 B1    | 08/2002 | Nguyen <i>et al.</i>     |       |           | /           |
|                     | AB62 | 2002/0037706 A1 | 03/2002 | Ichihara                 |       |           | /           |
|                     | AC62 | 4,441,080       | 04/1984 | Saari                    |       |           | /           |
|                     | AD62 | 4,873,492       | 10/1989 | Myer                     |       |           | /           |
|                     | AE62 | 5,697,074       | 12/1997 | Makikallio <i>et al.</i> |       |           | /           |
|                     | AF62 | 5,784,689       | 07/1998 | Kobayashi                |       |           | /           |
|                     | AG62 | 6,335,656 B1    | 01/2002 | Goldfarb <i>et al.</i>   |       |           | /           |
|                     | AH62 | 6,690,232 B2    | 02/2004 | Ueno <i>et al.</i>       |       |           | /           |
| Sp                  | AI62 | 5,636,140       | 06/1997 | Lee <i>et al.</i>        |       |           | /           |

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|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

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EXAMINER

*Skattachon*

DATE CONSIDERED

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FORM PTO-028  
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## U.S. PATENT DOCUMENTS

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|---------------------|------|-----------------|---------|-------------------------|-------|-----------|-------------|
| Sb                  | AA63 | 6,366,622 B1    | 04/2002 | Brown <i>et al.</i>     |       |           | /           |
|                     | AB63 | 6,600,795 B1    | 07/2003 | Ohta <i>et al.</i>      |       |           | /           |
|                     | AC63 | 4,250,458       | 02/1981 | Richmond <i>et al.</i>  |       |           | /           |
|                     | AD63 | 5,760,629       | 06/1998 | Urabe <i>et al.</i>     |       |           | /           |
|                     | AE63 | 6,084,465       | 07/2000 | Dasgupta                |       |           | /           |
|                     | AF63 | 6,204,789 B1    | 03/2001 | Nagata                  |       |           | /           |
|                     | AG63 | 6,064,054       | 05/2000 | Waczynski <i>et al.</i> |       |           | /           |
|                     | AH63 | 5,218,562       | 06/1993 | Basehore <i>et al.</i>  |       |           | /           |
| Sb                  | AI63 | 5,239,496       | 08/1993 | Vancraeynest            |       |           | /           |

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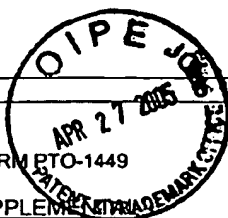
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EXAMINER *Sizhaattachay*

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| SB                  | AA64 | 5,896,304       | 04/1999 | Tiemann <i>et al.</i>  |       |           |             |
|                     | AB64 | 6,005,903       | 12/1999 | Mendelovicz            |       |           |             |
|                     | AC64 | 5,834,979       | 11/1998 | Yatsuka                |       |           |             |
|                     | AD64 | 6,798,351 B1    | 09/2004 | Sorrells <i>et al.</i> |       |           |             |
|                     | AE64 | 6,813,485 B2    | 11/2004 | Sorrells <i>et al.</i> |       |           |             |
|                     | AF64 | 5,410,270       | 04/1995 | Rybicki <i>et al.</i>  |       |           |             |
|                     | AG64 | 6,509,777 B2    | 01/2003 | Razavi <i>et al.</i>   |       |           |             |
|                     | AH64 | 5,982,329       | 11/1999 | Pittman <i>et al.</i>  |       |           |             |
| .58                 | AI64 | 3,614,630       | 10/1971 | Rorden                 |       |           |             |

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|---------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                     | AJ |                 |      |         |       |           | Yes<br>No   |
|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

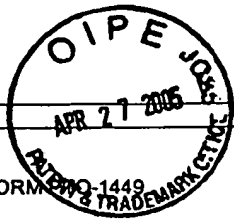
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

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|  | AQ |  |  |
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EXAMINER *Szchattachay*

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SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.0140006

APPLICATION NO.

10/086,250

INVENTORS

SORRELLS *et al.*

FILING DATE

March 4, 2002

ART UNIT

2687

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| EXAMINER<br>INITIAL |      | DOCUMENT NUMBER | DATE    | NAME                    | CLASS | SUB-CLASS | FILING DATE |
|---------------------|------|-----------------|---------|-------------------------|-------|-----------|-------------|
| SB                  | AA65 | 6,836,650 B2    | 12/2004 | Sorrells <i>et al.</i>  |       |           | /           |
|                     | AB65 | 5,844,868       | 12/1998 | Takahashi <i>et al.</i> |       |           | /           |
|                     | AC65 | 6,385,439 B1    | 05/2002 | Hellberg                |       |           | /           |
|                     | AD65 | 6,741,139 B2    | 05/2004 | Pleasant <i>et al.</i>  |       |           | /           |
|                     | AE65 | 6,823,178 B2    | 11/2004 | Pleasant <i>et al.</i>  |       |           | /           |
|                     | AF65 | 6,850,742 B2    | 02/2005 | Fayyaz                  |       |           | /           |
| SB                  | AG65 | 2002/0049038 A1 | 04/2002 | Sorrells <i>et al.</i>  |       |           | /           |
|                     | AH   |                 |         |                         |       |           |             |
|                     | AI   |                 |         |                         |       |           |             |

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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                     | AJ |                 |      |         |       |           | Yes<br>No   |
|                     | AK |                 |      |         |       |           | Yes<br>No   |
|                     | AL |                 |      |         |       |           | Yes<br>No   |
|                     | AM |                 |      |         |       |           | Yes<br>No   |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

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|  | AN |  |  |
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S. Shattachan

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|    |                          | FORM PTO-1449                    |  | ATTY. DOCKET NO.<br>1744.0140006 |   | APPLICATION NO.<br>10/086,250 |             |
|---|--------------------------|----------------------------------|--|----------------------------------|---|-------------------------------|-------------|
|   |                          | INFORMATION DISCLOSURE STATEMENT |  | APPLICANTS<br>Sorrrells et al.   |   |                               |             |
|   |                          | FILING DATE<br>March 4, 2002     |  | GROUP<br>2686                    |   |                               |             |
| U.S. PATENT DOCUMENTS   |                          |                                  |  |                                  |   |                               |             |
| EXAMINER<br>INITIAL   |                          | DOCUMENT<br>NUMBER               | DATE   | NAME                             | CLASS   | SUB-<br>CLASS                 | FILING DATE |
| SJS   | AA1                      | 2,057,613                        | 10/1936  | Gardner                          | RECEIVED<br>DEC 18 2003<br>Technology Center 2600 |                               |             |
|   | AB1                      | 2,241,078                        | 05/1941  | Vreeland                         |   |                               |             |
|   | AC1                      | 2,270,385                        | 01/1942  | Skillman                         |   |                               |             |
|   | AD1                      | 2,283,575                        | 05/1942  | Roberts                          |   |                               |             |
|   | AE1                      | 2,358,152                        | 09/1944  | Earp                             |   |                               |             |
|   | AF1                      | 2,410,350                        | 10/1946  | Labin et al.                     |   |                               |             |
|   | AG1                      | 2,451,430                        | 10/1948  | Barone                           |   |                               |             |
|   | AH1                      | 2,462,069                        | 02/1949  | Chatterjea et al.                |   |                               |             |
|   | AI1                      | 2,462,181                        | 02/1949  | Grosselfinger                    |   |                               |             |
|   | FOREIGN PATENT DOCUMENTS |                                  |  |                                  |   |                               |             |
| EXAMINER<br>INITIAL   |                          | DOCUMENT NUMBER                  | DATE   | COUNTRY                          | CLASS   | SUB-<br>CLASS                 | TRANSLATION |
| SJS   | AJ1                      | DE 42 37 692 C1                  | 03/1994  | DE                               |   |                               | No          |
|   | AK1                      | EP 0 035 166 A1                  | 09/1981  | EP                               |   |                               | No          |
|   | AL1                      | EP 0 193 899 B1                  | 06/1990  | EP                               |   |                               | N/A         |
|   | AM1                      | EP 0 380 351 A2                  | 08/1990  | EP                               |   |                               | N/A         |
| OTHER (Including Author, Title, Date, Pertinent Pages, etc.)  |                          |                                  |  |                                  |   |                               |             |
| SJS   | AN                       | 1                                | Aghvami, H. et al., "Land Mobile Satellites Using the Highly Elliptic Orbits- The UK T-SAT Mobile Payload," <i>Fourth International Conference on Satellite Systems for Mobile Communications and Navigation</i> , IEE, pp. 147-153 (October 17-19, 1988).       |                                  |   |                               |             |
|   | AO                       | 1                                | Akers, N.P. et al., "RF Sampling Gates: a Brief Review," <i>IEE Proceedings</i> , IEE, Vol. 133, Part A, No. 1, pp. 45-49 (January 1986).  |                                  |   |                               |             |
|   | AP                       | 1                                | Al-Ahmad, H.A.M. et al., "Doppler Frequency Correction for a Non-Geostationary Communications Satellite. Techniques for CERS and T-SAT," <i>Electronics Division Colloquium on Low Noise Oscillators and Synthesizers</i> , IEE, pp. 4/1-4/5 (January 23, 1986). |                                  |   |                               |             |
|   | AQ                       | 1                                | Ali, I. et al., "Doppler Characterization for LEO Satellites," <i>IEEE Transactions on Communications</i> , IEEE, Vol. 46, No. 3, pp. 309-313 (March 1998).  |                                  |   |                               |             |
|   | AR                       | 1                                | Allan, D.W., "Statistics of Atomic Frequency Standards," <i>Proceedings Of The IEEE Special Issue on Frequency Stability</i> , IEEE, pp. 221-230 (February 1966).  |                                  |   |                               |             |
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| FORM PTO-1449<br>INFORMATION DISCLOSURE STATEMENT |  |  |  | ATTY. DOCKET NO.<br>1744.0140006 |  | APPLICATION NO.<br>10/086,250 |  |
|   |  |  |  | APPLICANTS<br>Sorrells et al.    |  |                               |  |
|   |  |  |  | FILING DATE<br>March 4, 2002     |  | GROUP<br>2686                 |  |

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| EXAMINER INITIAL      |           | DOCUMENT NUMBER | DATE    | NAME              | CLASS | SUB-CLASS | FILING DATE |
| SFB                   | AA2       | 2,472,798       | 06/1949 | Fredendall        |       |           |             |
|                       | AB2       | 2,497,859       | 02/1950 | Boughtwood et al. |       |           |             |
|                       | AC2       | 2,499,279       | 02/1950 | Peterson          |       |           |             |
|                       | AD2       | 2,802,208       | 08/1957 | Hobbs             |       |           |             |
|                       | AE2       | 2,985,875       | 05/1961 | Grisdale et al.   |       |           |             |
|                       | AF2       | 3,023,309       | 02/1962 | Foulkes           |       |           |             |
|                       | AG2       | 3,069,679       | 12/1962 | Sweeney et al.    |       |           |             |
|                       | AH2       | 3,104,393       | 09/1963 | Vogelman          |       |           |             |
| AI2                   | 3,114,108 | 12/1963         | McManus |                   |       |           |             |

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| EXAMINER INITIAL         |     | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| SFB                      | AJ2 | EP 0 380 351 A3 | 02/1991 | EP      |       |           | N/A         |
|                          | AK2 | EP 0 411 840 A2 | 02/1991 | EP      |       |           | N/A         |
|                          | AL2 | EP 0 411 840 A3 | 07/1991 | EP      |       |           | N/A         |
|                          | AM2 | EP 0 411 840 B1 | 10/1995 | EP      |       |           | N/A         |

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| SFB  | AN | 2 | Allstot, D.J. et al., "MOS Switched Capacitor Ladder Filters," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-13, No. 6, pp. 806-814 (December 1978).  |
|  | AO | 2 | Allstot, D.J. and Black Jr. W.C., "Technological Design Considerations for Monolithic MOS Switched-Capacitor Filtering Systems," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 967-986 (August 1983).  |
|  | AP | 2 | Alouini, M. et al., "Channel Characterization and Modeling for Ka-Band Very Small Aperture Terminals," <i>Proceedings Of the IEEE</i> , IEEE, Vol. 85, No. 6, pp. 981-997 (June 1997).  |
|  | AQ | 2 | Andreyev, G.A. and Ogarev, S.A., "Phase Distortions of Keyed Millimeter-Wave Signals in the Case of Propagation in a Turbulent Atmosphere," <i>Telecommunications and Radio Engineering, Scripta Technica</i> , Vol. 43, No. 12, pp. 87-90 (December 1988). |
|  | AR | 2 | Antonetti, A. et al., "Optoelectronic Sampling in the Picosecond Range," <i>Optics Communications</i> , North-Holland Publishing Company, Vol. 21, No. 2, pp. 211-214 (May 1977).   |

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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
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March 4, 2002GROUP  
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| <i>SL</i>           | AA3 | 3,118,117          | 01/1964 | King et al. |       |               |             |
|                     | AB3 | 3,226,643          | 12/1965 | McNair      |       |               |             |
|                     | AC3 | 3,258,694          | 06/1966 | Shepherd    |       |               |             |
|                     | AD3 | 3,383,598          | 05/1968 | Sanders     |       |               |             |
|                     | AE3 | 3,384,822          | 05/1968 | Miyagi      |       |               |             |
|                     | AF3 | 3,454,718          | 07/1969 | Perreault   |       |               |             |
|                     | AG3 | 3,523,291          | 08/1970 | Pierret     |       |               |             |
|                     | AH3 | 3,548,342          | 12/1970 | Maxey       |       |               |             |
| <i>SL</i>           | AI3 | 3,555,428          | 01/1971 | Perreault   |       |               |             |

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| EXAMINER<br>INITIAL |     | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
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| <i>SL</i>           | AJ3 | EP 0 423 718 A2 | 04/1991 | EP      |       |               | N/A         |
|                     | AK3 | EP 0 423 718 A3 | 08/1992 | EP      |       |               | N/A         |
|                     | AL3 | EP 0 486 095 A1 | 05/1992 | EP      |       |               | N/A         |
| <i>SL</i>           | AM3 | EP 0 486 095 B1 | 02/1997 | EP      |       |               | N/A         |

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| <i>SL</i> | AN | 3 | Austin, J. et al., "Doppler Correction of the Telecommunication Payload Oscillators in the UK T-SAT," 18 <sup>th</sup> European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 851-857 (September 12 - 15, 1988). |
|           | AO | 3 | Auston, D.H., "Picosecond optoelectronic switching and gating in silicon," <i>Applied Physics Letters</i> , American Institute of Physics, Vol. 26, No. 3, pp. 101-103 (February 1, 1975).  |
|           | AP | 3 | Baher, H., "Transfer Functions for Switched-Capacitor and Wave Digital Filters," <i>IEEE Transactions on Circuits and Systems</i> , IEEE Circuits and Systems Society, Vol. CAS-33, No. 11, pp. 1138-1142 (November 1986).              |
|           | AQ | 3 | Baines, R., "The DSP Bottleneck," <i>IEEE Communications Magazine</i> , IEEE Communications Society, pp. 46-54 (May 1995).  |
| <i>SL</i> | AR | 3 | Banjo, O.P. and Vilar, E., "Binary Error Probabilities on Earth-Space Links Subject to Scintillation Fading," <i>Electronics Letters</i> , IEE, Vol. 21, No. 7, pp. 296-297 (March 28, 1985).   |

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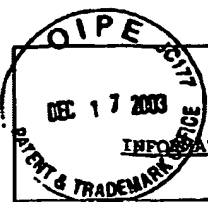
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March 4, 2002GROUP  
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| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE    | NAME            | CLASS | SUB-<br>CLASS | FILING DATE |
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| <i>SA</i>           | AA5 | 3,735,048          | 05/1973 | Tomsa et al.    |       |               |             |
|                     | AB5 | 3,806,811          | 04/1974 | Thompson        |       |               |             |
|                     | AC5 | 3,868,601          | 02/1975 | MacAfee         |       |               |             |
|                     | AD5 | 3,949,300          | 04/1976 | Sadler          |       |               |             |
|                     | AE5 | 3,967,202          | 06/1976 | Batz            |       |               |             |
|                     | AF5 | 3,980,945          | 09/1976 | Bickford        |       |               |             |
|                     | AG5 | 3,987,280          | 10/1976 | Bauer           |       |               |             |
|                     | AH5 | 3,991,277          | 11/1976 | Hirata          |       |               |             |
| <i>SA</i>           | AI5 | 4,003,002          | 01/1977 | Snijders et al. |       |               |             |

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|---------------------|-----|-----------------|---------|---------|-------|---------------|-------------|
| <i>SA</i>           | AJ5 | EP 0 632 288 A2 | 01/1995 | EP      |       |               | N/A         |
|                     | AK5 | EP 0 632 288 A3 | 07/1996 | EP      |       |               | N/A         |
|                     | AL5 | EP 0 696 854 A1 | 02/1996 | EP      |       |               | N/A         |
| <i>SA</i>           | AM5 | EP 0 782 275 A2 | 07/1997 | EP      |       |               | N/A         |

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| <i>SA</i> | AN | 5 | Blakey, J.R. et al., "Measurement of Atmospheric Millimetre-Wave Phase Scintillations in an Absorption Region," <i>Electronics Letters</i> , IEE, Vol. 21, No. 11, pp. 486-487 (May 23, 1985).  |
|           | AO | 5 | Burgueño, A. et al., "Influence of rain gauge integration time on the rain rate statistics used in microwave communications," <i>Annales des télécommunications</i> , International Union of Radio Science, pp. 522-527 (September/October 1988).   |
|           | AP | 5 | Burgueño, A. et al., "Long-Term Joint Statistical Analysis of Duration and Intensity of Rainfall Rate with Application to Microwave Communications," <i>Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation</i> , IEE, pp. 198-201 (March 30 - April 2, 1987). |
|           | AQ | 5 | Burgueño, A. et al., "Long Term Statistics of Precipitation Rate Return Periods in the Context of Microwave Communications," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 297-301 (April 4-7, 1989).                                  |
| <i>SA</i> | AR | 5 | Burgueño, A. et al., "Spectral Analysis of 49 Years of Rainfall Rate and Relation to Fade Dynamics," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 38, No. 9, pp. 1359-1366 (September 1990).  |

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## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL |     | DOCUMENT NUMBER | DATE    | NAME          | CLASS | SUB-CLASS | FILING DATE |
|------------------|-----|-----------------|---------|---------------|-------|-----------|-------------|
| <i>SP</i>        | AA7 | 4,142,155       | 02/1979 | Adachi        |       |           |             |
|                  | AB7 | 4,170,764       | 10/1979 | Salz et al.   |       |           |             |
|                  | AC7 | 4,204,171       | 05/1980 | Sutphin, Jr.  |       |           |             |
|                  | AD7 | 4,210,872       | 07/1980 | Gregorian     |       |           |             |
|                  | AE7 | 4,245,355       | 01/1981 | Pascoe et al. |       |           |             |
|                  | AF7 | 4,253,066       | 02/1981 | Fisher et al. |       |           |             |
|                  | AG7 | 4,253,069       | 02/1981 | Nossek        |       |           |             |
|                  | AH7 | 4,308,614       | 12/1981 | Fisher et al. |       |           |             |
| <i>SP</i>        | AI7 | 4,320,361       | 03/1982 | Kikkert       |       |           |             |

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| EXAMINER INITIAL |     | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
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| <i>SP</i>        | AJ7 | EP 0 874 499 A2 | 10/1998 | EP      |       |           | N/A         |
|                  | AK7 | FR 2 743 231 A1 | 07/1997 | FR      |       |           | No          |
|                  | AL7 | GB 2 161 344 A  | 01/1985 | GB      |       |           | N/A         |
| <i>SP</i>        | AM7 | GB 2 215 945 A  | 09/1989 | GB      |       |           | N/A         |

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|           |    |   |   |
|-----------|----|---|---|
| <i>SP</i> | AN | I | Copy of Declaration of Richard C. Looke filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.  |
|           | AO | I | Copy of Declaration of Charley D. Moses, Jr. filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.   |
|           | AP | I | Copy of Declaration of Jeffrey L. Parker and David F. Sorrells, with attachment Exhibit 1, filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 130 pages. |
|           | AQ | I | Dewey, R.J. and Collier, C.J., "Multi-Mode Radio Receiver," <i>Electronics Division Colloquium on Digitally Implemented Radios</i> , IEE, pp. 3/1-3/5 (October 18, 1985).                           |
| <i>SP</i> | AR | I | DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-276351, 1 page (November 13, 1990 - Date of publication of application).  |

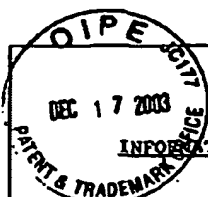
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|------------------|-----|-----------------|---------|---------------|-------|-----------|-------------|
| <i>SAB</i>       | AA8 | 4,320,536       | 03/1982 | Dietrich      |       |           |             |
|                  | AB8 | 4,346,477       | 08/1982 | Gordy         |       |           |             |
|                  | AC8 | 4,355,401       | 10/1982 | Ikoma et al.  |       |           |             |
|                  | AD8 | 4,356,558       | 10/1982 | Owen et al.   |       |           |             |
|                  | AE8 | 4,360,867       | 11/1982 | Gonda         |       |           |             |
|                  | AF8 | 4,363,132       | 12/1982 | Collin        |       |           |             |
|                  | AG8 | 4,365,217       | 12/1982 | Berger et al. |       |           |             |
|                  | AH8 | 4,370,572       | 01/1983 | Cosand et al. |       |           |             |
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|            | AO | 8 | DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-39632, 1 page (February 8, 1990 - Date of publication of application).                   |
|            | AP | 8 | DIALOG File 348 (European Patents) English Language Patent Abstract for EP 0 785 635 A1, 3 pages (December 26, 1996 - Date of publication of application). |
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## INFORMATION DISCLOSURE STATEMENT

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|                     | AK11 | FR 2 245 130    | 04/1975 | FR      |       |               | Yes<br>(See AP50) |
|                     | AL11 | DE 35 41 031 A1 | 05/1986 | DE      |       |               | Yes<br>(See AR50) |
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|                     | AE12 | 4,716,388          | 12/1987 | Jacobs                 |       |               |             |
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|                     | AK12 | WO 98/40968 A2&A3  | 09/1998 | PCT     |       |               | N/A               |
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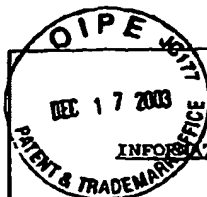
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1744.0140006APPLICATION NO.  
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|                  | AB16 | 4,902,979       | 02/1990 | Puckette, IV       |       |           |             |
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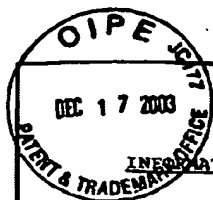
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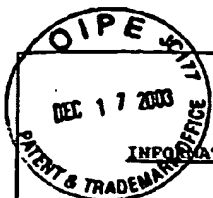
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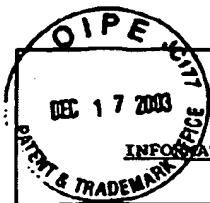
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| SP                  | AL   |                 |         |         |       |               | Yes<br>No   |
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|    |    |    |  |  |  |  |  |
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| SP | AN | 23 | Press Release, "Parkervision, Inc. Announces Appointments to its National Sales Force," Lippert/Heilshorn and Associates, 2 Pages (June 17, 1994).                     |  |  |  |  |
|    | AO | 23 | Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Lippert/Heilshorn and Associates, 3 Pages (August 9, 1994).             |  |  |  |  |
|    | AP | 23 | Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Lippert/Heilshorn and Associates, 3 Pages (October 28, 1994).           |  |  |  |  |
|    | AQ | 23 | Press Release, "Parkervision, Inc. Announces First Significant Dealer Sale of its Cameraman® System II," Lippert/Heilshorn and Associates, 2 Pages (November 7, 1994). |  |  |  |  |
| SP | AR | 23 | Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Lippert/Heilshorn and Associates, 2 Pages (March 1, 1995).                          |  |  |  |  |

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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL |      | DOCUMENT NUMBER | DATE    | NAME             | CLASS | SUB-CLASS | FILING DATE |
|------------------|------|-----------------|---------|------------------|-------|-----------|-------------|
| <i>EP</i>        | AA24 | 5,355,114       | 10/1994 | Sutterlin et al. |       |           |             |
|                  | AB24 | 5,361,408       | 11/1994 | Watanabe et al.  |       |           |             |
|                  | AC24 | 5,369,800       | 11/1994 | Takagi et al.    |       |           |             |
|                  | AD24 | 5,375,146       | 12/1994 | Chalmers         |       |           |             |
|                  | AE24 | 5,379,040       | 01/1995 | Mizomoto et al.  |       |           |             |
|                  | AF24 | 5,379,141       | 01/1995 | Thompson et al.  |       |           |             |
|                  | AG24 | 5,388,063       | 02/1995 | Takatori et al.  |       |           |             |
|                  | AH24 | 5,390,364       | 02/1995 | Webster et al.   |       |           |             |
| <i>EP</i>        | AI24 | 5,400,084       | 03/1995 | Scarpa           |       |           |             |

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## FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|------------------|----|-----------------|------|---------|-------|-----------|-------------|
| <i>EP</i>        | AJ |                 |      |         |       |           | Yes<br>No   |
| <i>EP</i>        | AK |                 |      |         |       |           | Yes<br>No   |
| <i>EP</i>        | AL |                 |      |         |       |           | Yes<br>No   |
| <i>EP</i>        | AM |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|           |    |    |   |
|-----------|----|----|---|
| <i>EP</i> | AN | 24 | Press Release, "Parkervision, Inc. Announces Joint Product Developments With VTEL," Lippert/Heilshorn and Associates, 2 Pages (March 21, 1995).             |
|           | AO | 24 | Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Lippert/Heilshorn and Associates, 3 Pages (April 28, 1995).                  |
|           | AP | 24 | Press Release, "Parkervision Wins Top 100 Product Districts' Choice Award," Parkervision Marketing and Manufacturing Headquarters, 1 Page (June 29, 1995).  |
|           | AQ | 24 | Press Release, "Parkervision National Sales Manager Next President of USDLA," Parkervision Marketing and Manufacturing Headquarters, 1 Page (July 6, 1995). |
| <i>EP</i> | AR | 24 | Press Release, "Parkervision Granted New Patent," Parkervision Marketing and Manufacturing Headquarters, 1 Page (July 21, 1995).                            |

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## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME          | CLASS | SUB-<br>CLASS | FILING DATE |
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| EP                  | AA25 | 5,404,127          | 04/1995 | Lee et al.    |       |               |             |
|                     | AB25 | 5,410,541          | 04/1995 | Hotto         |       |               |             |
|                     | AC25 | 5,410,743          | 04/1995 | Seely et al.  |       |               |             |
|                     | AD25 | 5,412,352          | 05/1995 | Graham        |       |               |             |
|                     | AE25 | 5,416,803          | 05/1995 | Janer         |       |               |             |
|                     | AF25 | 5,422,913          | 06/1995 | Wilkinson     |       |               |             |
|                     | AG25 | 5,423,082          | 06/1995 | Cygan et al.  |       |               |             |
|                     | AH25 | 5,428,638          | 06/1995 | Cioffi et al. |       |               |             |
| EP                  | AI25 | 5,428,640          | 06/1995 | Townley       |       |               |             |

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## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
| EP                  | AJ |                 |      |         |       |               | Yes<br>No   |
| EP                  | AK |                 |      |         |       |               | Yes<br>No   |
| EP                  | AL |                 |      |         |       |               | Yes<br>No   |
| EP                  | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |    |  |  |  |  |  |
|----|----|----|--|--|--|--|--|
| EP | AN | 25 | Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 31, 1995).       |  |  |  |  |
|    | AO | 25 | Press Release, "Parkervision, Inc. Expands Its Cameraman System II Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (September 22, 1995).               |  |  |  |  |
|    | AP | 25 | Press Release, "Parkervision Announces New Camera Control Technology," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 25, 1995).                            |  |  |  |  |
|    | AQ | 25 | Press Release, "Parkervision, Inc. Announces Completion of VTEL/Parkervision Joint Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995). |  |  |  |  |
| EP | AR | 25 | Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995).    |  |  |  |  |

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## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME            | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|------|--------------------|---------|-----------------|-------|---------------|-------------|
| <i>SK</i>           | AA26 | 5,434,546          | 07/1995 | Palmer          |       |               |             |
|                     | AB26 | 5,438,692          | 08/1995 | Mohindra        |       |               |             |
|                     | AC26 | 5,444,415          | 08/1995 | Dent et al.     |       |               |             |
|                     | AD26 | 5,444,416          | 08/1995 | Ishikawa et al. |       |               |             |
|                     | AE26 | 5,444,865          | 08/1995 | Heck et al.     |       |               |             |
|                     | AF26 | 5,446,421          | 08/1995 | Kechkaylo       |       |               |             |
|                     | AG26 | 5,446,422          | 08/1995 | Mattila et al.  |       |               |             |
|                     | AH26 | 5,448,602          | 09/1995 | Ohmori et al.   |       |               |             |
| <i>SK</i>           | AI26 | 5,451,899          | 09/1995 | Lawton          |       |               |             |

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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
| <i>SK</i>           | AJ |                 |      |         |       |               | Yes<br>No   |
| <i>SK</i>           | AK |                 |      |         |       |               | Yes<br>No   |
| <i>SK</i>           | AL |                 |      |         |       |               | Yes<br>No   |
| <i>SK</i>           | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|           |    |    |  |
|-----------|----|----|--|
| <i>SK</i> | AN | 26 | Press Release, "Parkervision's Cameraman Personal Locator Camera System Wins Telecon XV Award," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (November 1, 1995). |
|           | AO | 26 | Press Release, "Parkervision, Inc. Announces Purchase Commitment From VTEL Corporation," Parkervision Marketing and Manufacturing Headquarters, 1 Page (February 26, 1996).        |
|           | AP | 26 | Press Release, "ParkerVision, Inc. Announces Fourth Quarter and Year End Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (February 27, 1996).             |
|           | AQ | 26 | Press Release, "ParkerVision, Inc. Expands its Product Line," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (March 7, 1996).                                      |
| <i>SK</i> | AR | 26 | Press Release, "ParkerVision Files Patents for its Research of Wireless Technology," Parkervision Marketing and Manufacturing Headquarters, 1 Page (March 28, 1996).               |

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| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME             | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|------|--------------------|---------|------------------|-------|---------------|-------------|
| SP                  | AA27 | 5,454,007          | 09/1995 | Dutta            |       |               |             |
|                     | AB27 | 5,454,009          | 09/1995 | Fruit et al.     |       |               |             |
|                     | AC27 | 5,463,356          | 10/1995 | Palmer           |       |               |             |
|                     | AD27 | 5,463,357          | 10/1995 | Hobden           |       |               |             |
|                     | AE27 | 5,465,071          | 11/1995 | Kobayashi et al. |       |               |             |
|                     | AF27 | 5,465,410          | 11/1995 | Hiben et al.     |       |               |             |
|                     | AG27 | 5,465,415          | 11/1995 | Bien             |       |               |             |
|                     | AH27 | 5,471,162          | 11/1995 | McEwan           |       |               |             |
| SP                  | AI27 | 5,479,120          | 12/1995 | McEwan           |       |               |             |

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## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
| SP                  | AJ |                 |      |         |       |               | Yes<br>No   |
| SP                  | AK |                 |      |         |       |               | Yes<br>No   |
| SP                  | AL |                 |      |         |       |               | Yes<br>No   |
| SP                  | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |    |  |
|----|----|----|--|
| SP | AN | 27 | Press Release, "Parkervision, Inc. Announces First Significant Sale of Its Cameraman® Three-Chip System," Parkervision Marketing and Manufacturing Headquarters, 2 pages (April 12, 1996). |
|    | AO | 27 | Press Release, "Parkervision, Inc. Introduces New Product Line For Studio Production Market," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (April 15, 1996).             |
|    | AP | 27 | Press Release, "Parkervision, Inc. Announces Private Placement of 800,000 Shares," Parkervision Marketing and Manufacturing Headquarters, 1 Page (April 15, 1996).                         |
|    | AQ | 27 | Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (April 30, 1996).                            |
| SP | AR | 27 | Press Release, "Parkervision's New Studio Product Wins Award," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (June 5, 1996).  |

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FORM PTO-1449

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ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
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Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME             | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|------|--------------------|---------|------------------|-------|---------------|-------------|
| SB                  | AA28 | 5,479,447          | 12/1995 | Chow et al.      |       |               |             |
|                     | AB28 | 5,483,193          | 01/1996 | Kennedy et al.   |       |               |             |
|                     | AC28 | 5,483,549          | 01/1996 | Weinberg et al.  |       |               |             |
|                     | AD28 | 5,483,691          | 01/1996 | Heck et al.      |       |               |             |
|                     | AE28 | 5,490,173          | 02/1996 | Whitehart et al. |       |               |             |
|                     | AF28 | 5,493,581          | 02/1996 | Young et al.     |       |               |             |
|                     | AG28 | 5,493,721          | 02/1996 | Reis             |       |               |             |
|                     | AH28 | 5,495,200          | 02/1996 | Kwan et al.      |       |               |             |
| SB                  | AI28 | 5,495,202          | 02/1996 | Hsu              |       |               |             |

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## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
| C                   | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |    |   |
|----|----|----|---|
| SB | AN | 28 | Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (August 1, 1996).   |
|    | AO | 28 | Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 29, 1996). |
|    | AP | 28 | Press Release, "PictureTel and ParkerVision Sign Reseller Agreement," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1996).                          |
|    | AQ | 28 | Press Release, "CLI and ParkerVision Bring Enhanced Ease-of-Use to Videoconferencing," CLI/Parkervision, 2 Pages (January 20, 1997).  |
| SN | AR | 28 | Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (February 27, 1997).            |

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2686

## U.S. PATENT DOCUMENTS

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|---------------------|------|--------------------|---------|-------------------|-------|---------------|-------------|
| SP                  | AA29 | 5,485,500          | 02/1996 | Jovanovich et al. |       |               |             |
|                     | AB29 | 5,499,267          | 03/1996 | Ohe et al.        |       |               |             |
|                     | AC29 | 5,500,758          | 03/1996 | Thompson et al.   |       |               |             |
|                     | AD29 | 5,517,688          | 05/1996 | Fajen et al.      |       |               |             |
|                     | AE29 | 5,519,890          | 05/1996 | Pinckley          |       |               |             |
|                     | AF29 | 5,523,719          | 06/1996 | Longo et al.      |       |               |             |
|                     | AG29 | 5,523,726          | 06/1996 | Kroeger et al.    |       |               |             |
|                     | AH29 | 5,523,760          | 06/1996 | McEwan            |       |               |             |
| SB                  | AI29 | 5,539,770          | 07/1996 | Ishigaki          |       |               |             |

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## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |    |   |
|----|----|----|---|
| SP | AN | 29 | Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (April 29, 1997).                           |
|    | AO | 29 | Press Release, "NEC and Parkervision Make Distance Learning Closer," NEC America, 2 Pages (June 18, 1997).  |
|    | AP | 29 | Press Release, "Parkervision Supplies JPL with Robotic Cameras, Cameraman Shot Director for Mars Mission," Parkervision Marketing and Manufacturing Headquarters, 2 pages (July 8, 1997). |
|    | AQ | 29 | Press Release, "ParkerVision and IBM Join Forces to Create Wireless Computer Peripherals," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 23, 1997).                |
| SB | AR | 29 | Press Release, "ParkerVision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (July 31, 1997).            |

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**APPLICATION NO.**  
**10/086,250**

**GROUP  
2686**

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME                    | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|------|--------------------|---------|-------------------------|-------|---------------|-------------|
| Sb                  | AA30 | 5,555,453          | 09/1996 | Kajimoto <i>et al.</i>  |       |               |             |
|                     | AB30 | 5,557,641          | 09/1996 | Weinberg                |       |               |             |
|                     | AC30 | 5,557,642          | 09/1996 | Williams                |       |               |             |
|                     | AD30 | 5,578,341          | 11/1996 | Smith <i>et al.</i>     |       |               |             |
|                     | AE30 | 5,579,347          | 11/1996 | Lindquist <i>et al.</i> |       |               |             |
|                     | AF30 | 5,584,068          | 12/1996 | Mohindra                |       |               |             |
|                     | AG30 | 5,592,131          | 01/1997 | Labreche <i>et al.</i>  |       |               |             |
|                     | AH30 | 5,602,847          | 02/1997 | Pagano <i>et al.</i>    |       |               |             |
| Sb                  | AI30 | 5,602,868          | 02/1997 | Wilson                  |       |               |             |

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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

|    |    |           |  |
|----|----|-----------|--|
| 24 | AN | <u>30</u> | Press Release, "Parkervision, Inc. Announces Private Placement of 990,000 Shares," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (September 8, 1997).   |
|    | AO | <u>30</u> | Press Release, "Wal-Mart Chooses Parkervision for Broadcast Production," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 24, 1997).  |
|    | AP | <u>30</u> | Press Release, "Parkervision, Inc. Announces Third Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1997).  |
|    | AQ | <u>30</u> | Press Release, "ParkerVision Announces Breakthrough in Wireless Radio Frequency Technology," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (December 10, 1997).   |
| 87 | AR | <u>30</u> | Press Release, "Parkervision, Inc. Announces the Appointment of Joseph F. Skovron to the Position of Vice President, Licensing - Wireless Technologies," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (January 9, 1998). |

DATE CONSIDERED 12/10/04

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 FORM PTO-1449  
 INFORMATION DISCLOSURE STATEMENT

 ATTY. DOCKET NO.  
 1744.0140006

 APPLICATION NO.  
 10/086,250

 APPLICANTS  
 Sorrells et al.

 FILING DATE  
 March 4, 2002

 GROUP  
 2686

## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL |      | DOCUMENT NUMBER | DATE    | NAME          | CLASS | SUB-CLASS | FILING DATE |
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| Sh               | AA31 | 5,604,732       | 02/1997 | Kim et al.    |       |           |             |
|                  | AB31 | 5,608,531       | 03/1997 | Honda et al.  |       |           |             |
|                  | AC31 | 5,610,946       | 03/1997 | Tanaka et al. |       |           |             |
|                  | AD31 | RE 35,494       | 04/1997 | Nicollini     |       |           |             |
|                  | AE31 | 5,617,451       | 04/1997 | Mimura et al. |       |           |             |
|                  | AF31 | 5,619,538       | 04/1997 | Sempel et al. |       |           |             |
|                  | AG31 | 5,621,455       | 04/1997 | Rogers et al. |       |           |             |
|                  | AH31 | 5,630,227       | 05/1997 | Bella et al.  |       |           |             |
| Sh               | AI31 | 5,640,415       | 06/1997 | Pandua        |       |           |             |

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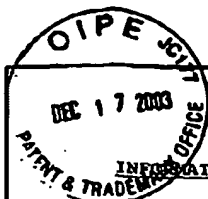
| EXAMINER INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                  | AJ |                 |      |         |       |           | Yes<br>No   |
|                  | AK |                 |      |         |       |           | Yes<br>No   |
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |    |   |  |  |  |  |
|----|----|----|---|--|--|--|--|
| Sh | AN | 31 | Press Release, "Parkervision Announces Existing Agreement with IBM Terminates-- Company Continues with Strategic Focus Announced in December," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (January 27, 1998). |  |  |  |  |
|    | AO | 31 | Press Release, "Laboratory Tests Verify Parkervision Wireless Technology," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (March 3, 1998).  |  |  |  |  |
|    | AP | 31 | Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (March 5, 1998).  |  |  |  |  |
|    | AQ | 31 | Press Release, "Parkervision Awarded Editors' Pick of Show for NAB 98," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (April 15, 1998).  |  |  |  |  |
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| EXAMINER | <i>Sh</i> | DATE CONSIDERED | 12/10/04 |
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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
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2686

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|                     | AB32 | 5,640,428          | 06/1997 | Abe et al.      |       |               |             |
|                     | AC32 | 5,640,698          | 06/1997 | Shen et al.     |       |               |             |
|                     | AD32 | 5,648,985          | 07/1997 | Bjerede et al.  |       |               |             |
|                     | AE32 | 5,650,785          | 07/1997 | Rodal           |       |               |             |
|                     | AF32 | 5,661,424          | 08/1997 | Tang            |       |               |             |
|                     | AG32 | 5,663,878          | 09/1997 | Walker          |       |               |             |
|                     | AH32 | 5,663,985          | 09/1997 | Striffler       |       |               |             |
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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|----|----|----|--|
| SP | AN | 32 | Press Release, "Parkervision 'DIRECT2DATA' Introduced in Response to Market Demand," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (July 9, 1998).          |
|    | AO | 32 | Press Release, "Parkervision Expands Senior Management Team," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 29, 1998).                                |
|    | AP | 32 | Press Release, "Parkervision Announces Second Quarter and Six Month Financial Results," Parkervision Marketing and Manufacturing Headquarters, 4 Pages (July 30, 1998).      |
|    | AQ | 32 | Press Release, "Parkervision Announces Third Quarter and Nine Month Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1998).   |
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| SB                  | AA34 | 5,724,002          | 03/1998 | Hulick                |       |               |             |
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|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|    | AP | 34 | Rein, H.M. and Zahn, M., "Subnanosecond-Pulse Generator with Variable Pulsewidth Using Avalanche Transistors," <i>Electronics Letters</i> , IEE, Vol. 11, No. 1, pp. 21-23 (January 9, 1975).           |
|    | AQ | 34 | Riad, S.M. and Nahman, N.S., "Modeling of the Feed-through Wideband (DC to 12.4 Ghz) Sampling-Head," <i>IEEE MTT-S International Microwave Symposium Digest</i> , IEEE, pp. 267-269 (June 27-29, 1978). |
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FORM PTO-1449

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|                  | AB35 | 5,760,645       | 06/1998 | Comte et al.    |       |           |             |
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| EXAMINER INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                  | AJ |                 |      |         |       |           | Yes<br>No   |
|                  | AK |                 |      |         |       |           | Yes<br>No   |
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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|  |                                  |  |                                  |                               |
|--|----------------------------------|--|----------------------------------|-------------------------------|
|  | FORM PTO-1449                    |  | ATTY. DOCKET NO.<br>1744.0140006 | APPLICATION NO.<br>10/086,250 |
|  | INFORMATION DISCLOSURE STATEMENT |  | APPLICANTS<br>Sorrells et al.    |                               |
|  |                                  |  | FILING DATE<br>March 4, 2002     | GROUP<br>2686                 |
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| SM               | AA36 | 5,793,801       | 08/1998 | Fertner          |       |           |             |
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|                  | AD36 | 5,809,060       | 09/1998 | Cafarella et al. |       |           |             |
|                  | AE36 | 5,818,582       | 10/1998 | Fernandez et al. |       |           |             |
|                  | AF36 | 5,825,254       | 10/1998 | Lee              |       |           |             |
|                  | AG36 | 5,834,985       | 11/1998 | Sundegård        |       |           |             |
|                  | AH36 | 5,864,754       | 01/1999 | Hotto            |       |           |             |
| SM               | AI36 | 5,881,375       | 03/1999 | Bonds            |       |           |             |

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|                  | AJ |                 |      |         |       |           | Yes<br>No   |
|                  | AK |                 |      |         |       |           | Yes<br>No   |
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |

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|    | AO | 36 | Sasikumar, M. et al., "Active Compensation in the Switched-Capacitor Biquad," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 1008-1009 (August 1983).   |  |  |  |  |
|    | AP | 36 | Saul, P.H., "A GaAs MESFET Sample and Hold Switch," <i>Fifth European Solid State Circuits Conference-ESSCIRC 79</i> , IEE, pp. 5-7 (1979).   |  |  |  |  |
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| EXAMINER  | DATE CONSIDERED 12/16/04 |
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| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME            | CLASS | SUB-<br>CLASS | FILING DATE |
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|                     | AC37 | 5,898,562          | 04/1999 | Heinonen        |       |               |             |
|                     | AD37 | 5,900,747          | 05/1999 | Brauns          |       |               |             |
|                     | AE37 | 5,901,054          | 05/1999 | Leu et al.      |       |               |             |
|                     | AF37 | 5,901,187          | 05/1999 | Iinuma          |       |               |             |
|                     | AG37 | 5,901,344          | 05/1999 | Opas            |       |               |             |
|                     | AH37 | 5,901,347          | 05/1999 | Chambers et al. |       |               |             |
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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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| 93 | AN | 37 | Shen, X. and Tawfik, A.N., "Dynamic Behaviour of Radio Channels Due to Trans-Horizon Propagation Mechanisms," <i>Electronics Letters</i> , IEE, Vol. 29, No. 17, pp. 1582-1583 (August 19, 1993).  |
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|    | AQ | 37 | Shen, D. et al., "A 900 MHZ Integrated Discrete-Time Filtering RF Front-End," <i>IEEE International Solid State Circuits Conference</i> , IEEE, Vol. 39, pp. 54-55 and 417 (February 1996).  |
| 93 | AR | 37 | Spillard, C. et al., "X-Band Tropospheric Transhorizon Propagation Under Differing Meteorological Conditions," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 451-455 (April 4-7, 1989).   |

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|                     | AC38 | 5,903,187          | 05/1999 | Claverie et al.  |       |               |             |
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|                     | AE38 | 5,903,421          | 05/1999 | Furutani et al.  |       |               |             |
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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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| 52                  | AA39 | 5,903,854          | 05/1999 | Abe et al.       |       |               |             |
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|                     | AC39 | 5,907,149          | 05/1999 | Marckini         |       |               |             |
|                     | AD39 | 5,907,197          | 05/1999 | Faultk           |       |               |             |
|                     | AE39 | 5,911,118          | 06/1999 | Nosswitz         |       |               |             |
|                     | AF39 | 5,911,123          | 06/1999 | Shaffer et al.   |       |               |             |
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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
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|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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**1744.0140006**

**APPLICATION NO.**  
**10/086,250**

**APPLICANTS**  
**Sorrells et al.**

**FILING DATE**  
**March 4, 2002**

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2686**

**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |           | DOCUMENT<br>NUMBER | DATE     | NAME                   | CLASS | SUB-<br>CLASS | FILING DATE |
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| SP                  | AA40      | 4,017,798          | 04/1977  | Gordy <i>et al.</i>    |       |               |             |
|                     | AB40      | 4,032,847          | 06/1977  | Unkauf                 |       |               |             |
|                     | AC40      | 4,253,067          | 02/1981  | Capias <i>et al.</i>   |       |               |             |
|                     | AD40      | 4,393,395          | 07/1983  | Hacke <i>et al.</i>    |       |               |             |
|                     | AE40      | 4,816,704          | 03/1989  | Flori, Jr.             |       |               |             |
|                     | AF40      | 4,841,265          | 06/1989  | Watanabe <i>et al.</i> |       |               |             |
|                     | AG40      | 4,943,974          | 07/1990  | Motamedl               |       |               |             |
|                     | AH40      | 5,115,409          | 05/1992  | Stepp                  |       |               |             |
| AI40                | 5,353,306 | 10/1994            | Yamamoto |                        |       |               |             |

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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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| 53 | AN | 40 | Tawfik, A.N. and Vilar, E., "Dynamic Structure of a Transhorizon Signal at X-band Over a Sea Path," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 446-450 (April 4-7, 1989).   |
|    | AO | 40 | Tawfik, A.N. and Vilar, E., "Statistics of Duration and Intensity of Path Loss in a Microwave Transhorizon Sea-Path," <i>Electronics Letters</i> , IEE, Vol. 26, No. 7, pp. 474-476 (March 29, 1990).   |
|    | AP | 40 | Tawfik, A.N. and Vilar, E., "X-Band Transhorizon Measurements of CW Transmissions Over the Sea- Part 1: Path Loss, Duration of Events, and Their Modeling," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE Antennas and Propagation Society, Vol. 41, No. 11, pp. 1491-1500 (November 1993). |
|    | AQ | 40 | Temes, G.C. and Tsvividis, T., "The Special Section on Switched-Capacitor Circuits," <i>Proceedings of the IEEE</i> , IEEE, Vol. 71, No. 8, pp. 915-916 (August 1983).  |
| 54 | AR | 40 | Thomas, G.B., <i>Calculus and Analytic Geometry</i> , Third Edition, Addison-Wesley Publishing, pp. 119-133 (1960).   |

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**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
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| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME            | CLASS | SUB-<br>CLASS | FILING DATE |
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| SP                  | AA41 | 5,515,014          | 05/1996 | Troutman        |       |               |             |
|                     | AB41 | 5,563,550          | 10/1996 | Toth            |       |               |             |
|                     | AC41 | 5,574,755          | 11/1996 | Persico         |       |               |             |
|                     | AD41 | 5,604,592          | 02/1997 | Kotidis et al.  |       |               |             |
|                     | AE41 | 5,638,396          | 06/1997 | Klimak          |       |               |             |
|                     | AF41 | 5,675,392          | 10/1997 | Nayebi et al.   |       |               |             |
|                     | AG41 | 5,694,096          | 12/1997 | Ushiroku et al. |       |               |             |
|                     | AH41 | 5,757,870          | 05/1998 | Miya et al.     |       |               |             |
| SP                  | AI41 | 5,768,323          | 06/1998 | Kroeger et al.  |       |               |             |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

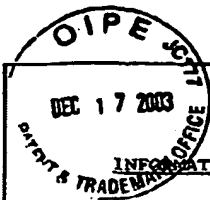
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| SP | AN | 41 | Tomassetti, Q., "An Unusual Microwave Mixer," 16 <sup>th</sup> European Microwave Conference, Microwave Exhibitions and Publishers, pp. 754-759 (September 8-12, 1986).  |  |  |  |  |
|    | AO | 41 | Tortoli, P. et al., "Bidirectional Doppler Signal Analysis Based on a Single RF Sampling Channel," IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society, Vol. 41, No. 1, pp. 1-3 (January 1984). |  |  |  |  |
|    | AP | 41 | Tsvividis, Y. and Antognetti, P. (Ed.), Design of MOS VLSI Circuits for Telecommunications, Prentice-Hall, p. 304 (1985).  |  |  |  |  |
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**APPLICATION NO.**  
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| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME                        | CLASS | SUB-<br>CLASS | FILING DATE |
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| JS                  | AA42 | 5,770,985          | 06/1998 | Ushiroku <i>et al.</i>      |       |               |             |
|                     | AB42 | 5,778,022          | 07/1998 | Walley                      |       |               |             |
|                     | AC42 | 5,812,546          | 09/1998 | Zhou <i>et al.</i>          |       |               |             |
|                     | AD42 | 5,818,869          | 10/1998 | Miya <i>et al.</i>          |       |               |             |
|                     | AE42 | 5,844,449          | 12/1998 | Abeno <i>et al.</i>         |       |               |             |
|                     | AF42 | 5,872,446          | 02/1999 | Cranford, Jr. <i>et al.</i> |       |               |             |
|                     | AG42 | 5,909,447          | 06/1999 | Cox <i>et al.</i>           |       |               |             |
|                     | AH42 | 5,933,467          | 08/1999 | Sehier <i>et al.</i>        |       |               |             |
| JS                  | AI42 | 5,952,895          | 09/1999 | McCune, Jr. <i>et al.</i>   |       |               |             |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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| AN | 42 | Veldmanis, J.A. et al., "Picosecond and Subpicosecond Optoelectronics for Measurements of Future High Speed Electronic Devices," <i>IEDM Technical Digest, IEEE</i> , pp. 597-600 (December 5-7, 1983).  |
| AO | 42 | van de Kamp, M.M.J.L., "Asymmetric signal level distribution due to tropospheric scintillation," <i>Electronics Letters</i> , IEE, Vol. 34, No. 11, pp. 1145-1146 (May 28, 1998).  |
| AP | 42 | Vasseur, H. and Vanhoenacker, D., "Characterization of tropospheric turbulent layers from radiosonde data," <i>Electronics Letters</i> , IEE, Vol. 34, No. 4, pp. 318-319 (February 19, 1998).   |
| AQ | 42 | Verdone, R., "Outage Probability Analysis for Short-Range Communication Systems at 60 Ghz in ATT Urban Environments," <i>IEEE Transactions on Vehicular Technology</i> , IEEE Vehicular Technology Society, Vol. 46, No. 4, pp. 1027-1039 (November 1997). |
| AR | 42 | Vieira-Ribeiro, S.A., <i>Single-IF DECT Receiver Architecture using a Quadrature Sub-Sampling Band-Pass Sigma-Delta Modulator</i> , Thesis for Degree of Master's of Engineering, Carleton University, UMI Dissertation Services, pp. 1-180 (April 1995).  |

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|---------------------|------|--------------------|---------|--------------------------|-------|---------------|-------------|
| 32                  | AA43 | 5,960,033          | 09/1999 | Shibano <i>et al.</i>    |       |               |             |
|                     | AB43 | 6,041,073          | 03/2000 | Davidovici <i>et al.</i> |       |               |             |
|                     | AC43 | 6,054,889          | 04/2000 | Kobayashi                |       |               |             |
|                     | AD43 | 6,084,922          | 07/2000 | Zhou <i>et al.</i>       |       |               |             |
|                     | AE43 | 6,125,271          | 09/2000 | Rowland <i>et al.</i>    |       |               |             |
|                     | AF43 | 6,147,340          | 11/2000 | Levy                     |       |               |             |
|                     | AG43 | 6,147,763          | 11/2000 | Steinlechner             |       |               |             |
|                     | AH43 | 6,150,890          | 11/2000 | Damgaard <i>et al.</i>   |       |               |             |
| EB                  | AI43 | 5,126,682          | 06/1992 | Weinberg <i>et al.</i>   |       |               |             |

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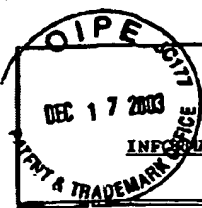
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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|----|----|-----------|---|
| SA | AN | <u>43</u> | Vilar, E. et al., "A Comprehensive/Selective MM-Wave Satellite Downlink Experiment on Fade Dynamics," <i>Tenth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 2.98-2.101 (April 14-17, 1997).        |
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|    | AP | <u>43</u> | Vilar, E. and Smith, H., "A Theoretical and Experimental Study of Angular Scintillations in Earth Space Paths," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE, Vol. AP-34, No. 1, pp. 2-10 (January 1986).                              |
|    | AQ | <u>43</u> | Vilar, E. et al., "A Wide Band Transhorizon Experiment at 11.6 Ghz," <i>Eighth International Conference on Antennas and Propagation</i> , Electronics Division of the IEE, pp. 441-445 (March 30- April 2, 1993).                                     |
| SD | AR | <u>43</u> | Vilar, E. and Matthews, P.A., "Amplitude Dependence of Frequency in Oscillators," <i>Electronics Letters</i> , IEE, Vol. 8, No. 20, pp. 509-511 (October 5, 1972).  |

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FORM PTO-1449

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| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME               | CLASS | SUB-<br>CLASS | FILING DATE |
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| 9/3                 | AA44 | 5,841,811          | 11/1998 | Song               |       |               |             |
|                     | AB44 | 4,051,475          | 09/1977 | Campbell           |       |               |             |
|                     | AC44 | 5,853,642          | 09/1999 | Feldtkeller et al. |       |               |             |
|                     | AD44 | 4,653,117          | 03/1987 | Heck               |       |               |             |
|                     | AE44 | 5,859,878          | 01/1999 | Phillips et al.    |       |               |             |
|                     | AF44 | 5,894,496          | 04/1999 | Jones              |       |               |             |
|                     | AG44 | 5,915,278          | 08/1999 | Mallick            |       |               |             |
|                     | AH44 | 6,028,887          | 02/2000 | Harrison et al.    |       |               |             |
| 6/6                 | AI44 | 6,081,691          | 06/2000 | Renard et al.      |       |               |             |

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| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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| 9/3 | AN | 44 | Vilar, E. et al., "An experimental mm-wave receiver system for measuring phase noise due to atmospheric turbulence," <i>Proceedings of the 25<sup>th</sup> European Microwave Conference</i> , Nexus House, pp. 114-119 (1995).                                |  |  |  |  |
|     | AO | 44 | Vilar, E. and Burgueño, A., "Analysis and Modeling of Time Intervals Between Rain Rate Exceedances in the Context of Fade Dynamics," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 39, No. 9, pp. 1308-1312 (September 1991). |  |  |  |  |
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|     | AQ | 44 | Vilar, E., "Antennas and Propagation: A Telecommunications Systems Subject," <i>Electronics Division Colloquium on Teaching Antennas and Propagation to Undergraduates</i> , IEE, pp. 7/1-7/6 (March 8, 1988).   |  |  |  |  |
| 9/6 | AR | 44 | Vilar, E. et al., "CERS". Millimetre-Wave Beacon Package and Related Payload Doppler Correction Strategies," <i>Electronics Division Colloquium on CERS- Communications Engineering Research Satellite</i> , IEE, pp. 10/1-10/10 (April 10, 1984).             |  |  |  |  |

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FORM PTO-1449

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1784.0140006APPLICATION NO.  
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## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE    | NAME            | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|------|--------------------|---------|-----------------|-------|---------------|-------------|
| 23                  | AA45 | 6,121,819          | 09/2000 | Traylor         |       |               |             |
|                     | AB45 | 6,144,236          | 11/2000 | Vice et al.     |       |               |             |
|                     | AC45 | 6,144,846          | 11/2000 | Durec           |       |               |             |
|                     | AD45 | 6,175,728 B1       | 01/2001 | Milama          |       |               |             |
|                     | AE45 | 5,705,949          | 01/1998 | Alajunas et al. |       |               |             |
|                     | AF45 | 5,883,548          | 03/1999 | Assard et al.   |       |               |             |
|                     | AG45 | 4,484,143          | 11/1984 | French et al.   |       |               |             |
|                     | AH45 | 5,841,324          | 11/1998 | Williams        |       |               |             |
| 90                  | AI45 | 4,855,894          | 08/1989 | Asahi et al.    |       |               |             |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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|----|----|----|--|
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|    | AQ | 45 | Vilar, E. and Larsen, J.R., "Elevation Dependence of Amplitude Scintillations on Low Elevation Earth Space Paths," <i>Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation</i> , IEE, pp. 150-154 (April 4-7, 1989). |
| 90 | AR | 45 | Vilar, E. et al., "Experimental System and Measurements of Transhorizon Signal Levels at 11 Ghz," <i>18th European Microwave Conference</i> , Microwave Exhibitions and Publishers Ltd., pp. 429-435 (September 12 - 15, 1988).                          |

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|---------------------|------|--------------------|---------|-------------------|-------|---------------|-------------|
| EB                  | AA46 | 5,319,799          | 06/1994 | Morita            |       |               |             |
|                     | AB46 | 5,801,654          | 09/1998 | Traylor           |       |               |             |
|                     | AC46 | 5,369,404          | 11/1994 | Galton            |       |               |             |
|                     | AD46 | 3,716,730          | 02/1973 | Cerny, Jr.        |       |               |             |
|                     | AE46 | 4,080,573          | 03/1978 | Howell            |       |               |             |
|                     | AF46 | 4,334,324          | 06/1982 | Hoover            |       |               |             |
|                     | AG46 | 4,369,522          | 01/1983 | Cerny, Jr. et al. |       |               |             |
|                     | AH46 | 5,465,418          | 11/1995 | Zhou et al.       |       |               |             |
| W                   | AI46 | 5,513,389          | 04/1996 | Reeser et al.     |       |               |             |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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|----|----|----|--|
| EA | AN | 46 | Vilar, E. and Matthews, P.A., "Importance of Amplitude Scintillations in Millimetric Radio Links," <i>Proceedings of the 4<sup>th</sup> European Microwave Conference</i> , Microwave Exhibitions and Publishers, pp. 202-206 (September 10-13, 1974).                               |
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|    | AP | 46 | Vilar, E. and Matthews, P.A., "Measurement of Phase Fluctuations on Millimetric Radiowave Propagation," <i>Electronics Letters</i> , IEE, Vol. 7, No. 18, pp. 566-568 (September 9, 1971).   |
|    | AQ | 46 | Vilar, E. and Wan, K.W., "Narrow and Wide Band Estimates of Field Strength for Indoor Communications in the Millimetre Band," <i>Electronics Division Colloquium on Radiocommunications in the Range 30-60 Ghz</i> , IEE, pp. 5/1-5/8 (January 17, 1991).                            |
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|  | FORM PTO-1449                    |  | ATTY. DOCKET NO.<br>1744.0140006 | APPLICATION NO.<br>10/086,250 |
|  | INFORMATION DISCLOSURE STATEMENT |  |                                  |                               |
|  | APPLICANTS<br>Sorrells et al.    |  | FILING DATE<br>March 4, 2002     | GROUP<br>2686                 |
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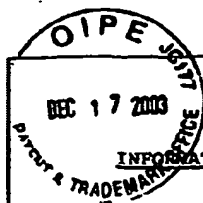
| EXAMINER INITIAL |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|------------------|----|-----------------|------|---------|-------|-----------|-------------|
|                  | AJ |                 |      |         |       |           | Yes<br>No   |
|                  | AK |                 |      |         |       |           | Yes<br>No   |
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |

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|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
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|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|---------------------|----|-----------------|------|---------|-------|---------------|-------------|
|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|                  | AK |                 |      |         |       |           | Yes<br>No   |
|                  | AL |                 |      |         |       |           | Yes<br>No   |
|                  | AM |                 |      |         |       |           | Yes<br>No   |

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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.0140006APPLICATION NO.  
10/086,250APPLICANTS  
Sorrells et al.FILING DATE  
March 4, 2002GROUP  
2686

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|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
|                     | AL |                 |      |         |       |               | Yes<br>No   |
|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|  | INFORMATION DISCLOSURE STATEMENT |  | APPLICANTS<br>Sorrells et al.    |                               |
|  |                                  |  | FILING DATE<br>March 4, 2002     | GROUP<br>2686                 |
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|                  | AJ |                 |      |         |       |           | Yes<br>No   |
|                  | AK |                 |      |         |       |           | Yes<br>No   |
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|                  | AM |                 |      |         |       |           | Yes<br>No   |

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|                     | AJ |                 |      |         |       |               | Yes<br>No   |
|                     | AK |                 |      |         |       |               | Yes<br>No   |
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|                     | AM |                 |      |         |       |               | Yes<br>No   |

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|  |  |  |  | APPLICANTS<br>Sorrells et al.    |  |                               |  |
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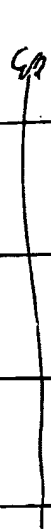
  

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|                          | AK |                 |      |         |       |           | Yes<br>No   |
|                          | AL |                 |      |         |       |           | Yes<br>No   |
|                          | AM |                 |      |         |       |           | Yes<br>No   |

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